

This listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

What is claimed is:

1-40. Canceled.

41. (Previously Presented) A method of treatment or prophylaxis of a condition associated with elevated levels of non-amidated gastrin, comprising the step of administering to a mammal in need of such treatment an effective amount of a compound which has the ability to inhibit the binding of ferric ions to any one or more of glycine-extended gastrin₁₇ or progastrin or progastrin-derived peptides, but which does not inhibit the activity of amidated gastrin, thereby to inhibit the activity of non-amidated gastrins.

42. (Previously Presented) A method according to claim 41, in which the compound inhibits the binding of ferric ions to glutamate 7 of glycine-extended gastrin₁₇.

43. (Previously Presented) A method according to claim 42, in which the binding of ferric ions to glutamate 8 and glutamate 9 of glycine-extended gastrin₁₇ is also inhibited.

44. (Previously Presented) A method according to claim 41, in which the compound is a metal ion, or a pharmaceutically-acceptable salt or complex thereof, which is able to occupy the ferric ion binding site of non-amidated gastrins, and thereby to block their biological activity.

45. (Previously Presented) A method according to claim 44, in which the metal ion is any metal ion capable of occupying the ferric ion binding site of non-amidated gastrins, with the provisos that

(i) when the condition is one caused by *Helicobacter pylori* infection, the metal ion is not bismuth, and

(ii) when the condition is cancer, the salt or complex is not BiSrC₆H₅O₆.

46. (Previously Presented) A method according to claim 45, in which the metal ion is Bi³⁺ or Ga³⁺.

47. (Previously Presented) A method according to claim 41, in which the compound is an exchange-inert complex between a non-amidated gastrin and either Co (III) or Cr (III) ions.
48. (Previously Presented) A method according to claim 41, in which the compound is a pharmaceutically-acceptable chelating agent with a high degree of specificity for ferric ions.
49. (Previously Presented) A method according to claim 48, in which the chelating agent is membrane-impermeable.
50. (Previously Presented) A method according to claim 49, in which the chelating agent is desferrioxamine (DFO), ethylene diamine tetracetic acid (EDTA) or diethylene triamine pentacetic acid (DTPA).
51. (Previously Presented) A method according to claim 48, in which the chelating agent is a membrane-permeable chelator.
52. (Previously Presented) A method according to claim 51, in which the chelating agent is clioquinol.
53. (Previously Presented) A method according to claim 41, in which the compound does not have a significant inhibitory effect on Gamide-induced inositol phosphate production and/or on cellular proliferation in cells which express the CCK-2 receptor.
54. (Previously Presented) A method according to claim 46, in which the compound is one or more of colloidal bismuth subcitrate (CBS), bismuth subcitrate, bismuth citrate, bismuth salicylate, bismuth subsalicylate, bismuth subnitrate, bismuth subcarbonate, bismuth tartrate, bismuth subgallate, tripotassium dicitrate bismuthate or bismuth aluminate.
55. (Previously Presented) A method according to claim 54, in which the compound is one or more of colloidal bismuth subcitrate (CBS), tripotassium dicitrate bismuthate, bismuth subcitrate, or bismuth subsalicylate.

56. (Previously Presented) A method according to claim 55, in which the compound is CBS or tripotassium dicitrato bismuthate.

57. (Previously Presented) A method according to claim 56, in which the compound is CBS.

58. (Previously Presented) A method according to claim 41, in which the condition is selected from the group consisting of gastrin-producing tumours, colorectal carcinomas, gastrinomas, islet cell carcinomas, lung cancer, ovarian cancer, pituitary cancer and pancreatic cancer.

59. (Previously Presented) A method according to claim 58, in which the condition is colon cancer or pancreatic cancer.

60. (Previously Presented) A method according to claim 59, in which the condition is colon cancer and the mammal is at elevated risk thereof.

61. (Previously Presented) A method according to claim 60, in which the mammal is an individual with any one or more of familial adenomatous polyposis, with a family history of colon cancer, and/or with loss of imprinting of IGF-2.

62. (Previously Presented) A method according to claim 41, in which the condition is selected from the group consisting of atrophic gastritis, G cell hyperplasia, pernicious anaemia, renal failure and ulcerative colitis.

63. (Previously Presented) A method according to claim 41, in which the condition is selected from the group consisting of gastrointestinal ulcers, gastro-oesophageal reflux, gastric carcinoid, and Zollinger-Ellison syndrome, with the proviso that the metal ion is not bismuth.

64. (Currently Amended) A peptide which is a fragment of a non-amidated gastrin and which

(a) comprises at least glutamate residue 7 of the -(Glu)₅- sequence of non-amidated gastrin, and

(b) is capable of binding one or more ferric ions, with the proviso that the peptide is not full length Ggly, full length glycine-extended gastrin or full length progastrin, or LE₅AYG (SEQ ID NO: 16).

65. (Previously Presented) A peptide according to claim 64, consisting of amino acids 5 to 14 of the Ggly sequence.

66. (Currently Amended) A peptide according to claim 64, selected from the group consisting of Ggly₅₋₁₈ (SEQ ID NO: 9), Ggly₁₋₁₁ (SEQ ID NO: 7), LE₅AY (SEQ ID NO: 20), LE₅A (SEQ ID NO: 3), LE₅ (SEQ ID NO: 17), E₅A (SEQ ID NO: 18), E₅ (SEQ ID NO: 19), and E₅AY (SEQ ID NO: 2).

67. (Previously Presented) A peptide according to claim 64, in which the carboxy terminus of the peptide is amidated.

68. (Previously Presented) A peptide according to claim 64, in which the amino terminus of the peptide is acetylated.

69. (Previously Presented) A complex comprising

(a) a non-amidated gastrin, a peptide fragment thereof according to claim 64, or LE₅AYG (SEQ ID NO: 16), and

(b) a trivalent metal ion.

70. (Previously Presented) A complex according to claim 69, in which the trivalent metal ion is Bi³⁺ or Ga³⁺.

71. (Previously Presented) A complex according to claim 69, comprising a non-amidated gastrin and bismuth ions.

72. (Currently Amended) A composition comprising

(a) a peptide according to claim 64, or LE₅AYG (SEQ ID NO: 16), together with a pharmaceutically acceptable carrier, excipient or diluent.

73. (Previously Presented) A method of promoting intestinal function, comprising the step of administering a peptide according to claim 64 to a subject in need of such treatment.

74. (Previously Presented) A method according to claim 73, in which the subject is suffering from injury to the bowel, an inflammatory condition of the bowel, or short bowel syndrome, has undergone a partial or complete resection of the bowel, or is undergoing total parenteral nutrition.

75. (Previously Presented) A method of screening of candidate metal ion-binding compounds for ability to modulate the activity of non-amidated gastrins, comprising the steps of

(a) assessing the ability of the compound to inhibit binding of ferric ions to a non-amidated gastrin and/or

(b) assessing the ability of the compound to modulate proliferation and/or migration of cells of a gastric mucosal cell line in response to a non-amidated gastrin.

76. (Currently Amended) A method according to claim 75, in which the non-amidated gastrin is Ggly₁₇ (SEQ ID NO: 4).

77. (Previously Presented) A method according to claim 75, in which the gastric mucosal cell line is IMGE-5.

78. (Previously Presented) A method according to claim 75, in which the compound is additionally assessed for its ability to inhibit Gamide-induced inositol phosphate production, and/or cellular proliferation in cells which express the CCK-2 receptor.

79. (Previously Presented) A composition comprising a complex according to claim 69, together with a pharmaceutically acceptable carrier, excipient or diluent.

80. (Currently Amended) A method of promoting intestinal function, comprising the step of administering

(a) A peptide which is a fragment of a non-amidated gastrin and which (i) comprises at least glutamate residue 7 of the -(Glu)₅- sequence of non amidated gastrin, and (ii) is capable of binding one or more ferric ions, with the proviso that the peptide is not full

length Ggly, full length glycine-extended gastrin or full length progastrin, and

(b) a complex comprising (i) a non-amidated gastrin, a peptide fragment thereof according to claim 29, or LE₅AYG (SEQ ID NO: 16), and (ii) a trivalent metal ion to a subject in need of such treatment.

81. (Currently Amended) A method according to claim 73, in which the non-amidated gastrin is Ggly₁₇ (SEQ ID NO: 4).